Crain & Associates
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EXHIBIT F

DOUGLAS PARK
TRANSPORTATION IMPROVEMENTS AND PHASING PROGRAM

The goal of the Transportation Improvements Phasing Program for the Douglas Park project (the "Project") is to mitigate significant Project traffic impacts before they occur during the development of the Project. In order to accomplish this goal, the measures in this program necessary to mitigate a significant Peak Hour (as defined in the Development Agreement) traffic impact being caused at the location by the Project shall be in place, as described below. The procedures described below shall be followed to ensure the timely implementation of these measures.

The Project Trip Cap is 5,872 Peak Hour trips, which does not include any adjustments for internal trip reductions, or the Project Transportation Demand Management (TDM) Program. No Project building permit shall be issued if the calculated Project trip generation exceeds this Trip Cap and until otherwise demonstrated by the Company or its designee that any excess trips have been adequately reduced or mitigated to the satisfaction of the City Traffic Engineer.

Prior to the issuance of each new Project building permit, a calculation shall be made of the total site trip generation. This calculation shall add the trip generation of the new Project building to the total site trip generation calculated for the previously approved Project building permit. The calculations shall be based on the trip generation rates in Table F-1. These rates do not include any adjustments for internal trip reductions or the Project TDM Program. If more current trip generation rates applicable to Project uses are available and have been published in the Institute of Transportation Engineers (ITE) Trip Generation manual, the City Traffic Engineer shall have the option of using the more current ITE rates. Where development flexibility is allowed, such flexibility shall be based on the trip generation equivalency rates in Table F-2, unless the equivalency rates require revision due to the use of more current ITE trip generation rates as previously noted. For allowable Project uses that are difficult to categorize, the City Traffic Engineer shall use reasonable methods to establish the appropriate trip generations or equivalencies for those uses.

Trip generation credit shall also be granted for buildings demolished or removed from the site since October 1, 2000, as documented by the Company or its designee. Such credit shall be granted according to the "Existing Uses" trip generation rate of 0.30 per 1,000 gross square feet in Table F-1. This rate is based on site driveway traffic volumes counted approximately October 1, 2002, which inherently reflect occupied and unoccupied buildings that existed on the site at that time.

Table F-1
Project Trip Generation Rates for Proposed and Existing Uses

Proposed Use	Trip Generation Rate
Office Park ("Commercial District")	1.25 per 1,000 gsf
Single-Family Detached	1.01 per du
Apartment	0.59 per du
Condominium/Townhouse/Flat	0.43 per du
Retail	4.96 per 1,000 gsf
Hotel	0.61 per rm
Existing Uses To Be Removed	
Office, R & D, Warehousing, Manufacturing Mechanical, Storage	0.30 per 1,000 gsf

Note: gsf = gross square feet
du = dwelling unit
rm = room

Table F-2
Project Trip Generation Equivalency Rates for Proposed Uses

Proposed Land Use and Unit of Measure		Peak Hour Trip Generation Equivalency Rate		
Office Park ("Comm. Distr."), 1,000 gsf	=	1.238	du	Single-Family Detached
	=	2.119	du	Apartment
	=	2.907	du	Condominium/Townhouse/Flat
	=	252.016	gsf	Retail
	=	2.049	rm	Hotel
Single-Family Detached, 1 du	=	808.000	gsf	Office Park ("Comm. Distr.")
	=	1.712	du	Apartment
	=	2.349	du	Condominium/Townhouse/Flat
	=	203.629	gsf	Retail
	=	1.656	rm	Hotel
Apartment, 1 du	=	472.000	gsf	Office Park ("Comm. Distr.")
	=	0.584	du	Single-Family Detached
	=	1.372	du	Condominium/Townhouse/Flat
	=	118.952	gsf	Retail
	=	0.967	rm	Hotel
Condominium/Townhouse/Flat, 1 du	=	344.000	gsf	Office Park ("Comm. Distr.")
	=	0.426	du	Single-Family Detached
	=	0.729	du	Apartment
	=	86.694	gsf	Retail
	=	0.705	rm	Hotel
Retail, 1,000 sf	=	3,968.000	gsf	Office Park ("Comm. Distr.")
	=	4.911	du	Single-Family Detached
	=	8.407	du	Apartment
	=	11.535	du	Condominium/Townhouse/Flat
	=	8.131	rm	Hotel
Hotel, 1 rm	=	488.000	gsf	Office Park ("Comm. Distr.")
	=	0.604	du	Single-Family Detached
	=	1.034	du	Apartment
	=	1.419	du	Condominium/Townhouse/Flat
	=	122.984	gsf	Retail

Based on the total site trip generation calculated with the inclusion of the new Project building, any applicable transportation improvement measures shall be assigned from the list below. All applicable measures shall be completed prior to the issuance of the final certificate of occupancy for the new Project building, except that such a certificate shall not be withheld if an applicable

measure is delayed by circumstances beyond the control of the Company or its designee, or rejected by a jurisdiction where the measure is located. In the event an applicable measure is rejected by a jurisdiction where the measure is located, prior to the construction or installation of that measure, a mitigation measure of reasonably similar cost and effectiveness may be substituted as the City shall direct. If no such measure can be identified, then an in-lieu payment in the amount of the cost of the original measure shall be made to the City's Traffic Mitigation Program Fund. The cost of the original improvement shall be determined by a Project Study Report or equivalent document acceptable to the Director of Public Works. In addition, the Company or its designee shall not be precluded from accelerating the implementation of any of these measures.

Category A - Area-Wide ATCS/ITS Measures

Adaptive Traffic Control System (ATCS) and Intelligent Transportation System (ITS) Connectivity with Freeway Ramps: Fund or cause the funding for the design and construction of a state-of-the-art traffic signal system, such as ATCS, along the following eight arterial corridors: 1) Del Amo Boulevard, approximately from the Long Beach Freeway to the San Gabriel River Freeway; 2) Carson street, approximately from Long Beach Boulevard-San Antonio Drive to the San Gabriel River Freeway; 3) Spring Street, approximately from Atlantic Avenue to the San Gabriel River Freeway; 4) Willow Street, approximately from Atlantic Avenue to the San Gabriel River Freeway; 5) Atlantic Avenue, approximately from the Artesia Freeway to Willow Street; 6) Cherry Avenue, approximately from the Artesia Freeway to Pacific Coast Highway; 7) Lakewood Boulevard, approximately from the Artesia Freeway to Stearns Street; and 8) Bellflower Boulevard, approximately from the Artesia Freeway to the San Diego Freeway.

In addition to funding for ATCS along the above eight corridors, an area-wide ITS program shall be included to improve capacity at both corridor and non-corridor signalized intersections. The ITS program will include interconnect, traffic detectors, surveillance cameras, message signs and other means that connect the surface street signal system with adjacent freeway on- and off-ramp meters and signals. Such connectivity and linkage with the freeway system will provide feedback to the surface street signal system and allow further adjustments in signal operations to enhance area-wide system capacity. The completed network of ATCS/ITS corridor and related improvements is illustrated in Figure F-1.

ATCS and the affiliated ITS program measures affecting the following intersections shall be installed no later than the triggering of the corresponding Peak Hour trips:

Corridors and Study Intersections	Trigger Value*
o Lakewood Corridor (A):	1,081*
- Lakewood Blvd./Carson St. (I/S #45; 1,081**)	
- Lakewood Blvd./Spring St. (I/S #78; 1,113**)	
- Lakewood Blvd./South St. (I/S #17; 1,332**)	
- Lakewood Blvd./Stearns St. (I/S #95; 1,499**)	
- Lakewood Blvd./Willow St. (I/S #89; 1,772**)	
o Bellflower/Spring Corridor	1,257*
- Bellflower Blvd./Wardlow Rd. (I/S #68; 1,257**)	
- Bellflower Blvd./Spring St. (I/S #80; 3,559**)	
- Spring St./Clark Ave. (I/S #79; 3,866**)	
- Spring St./Cherry Ave. (I/S #74; 5,073**)	
o Carson Corridor (A)	1,449*
- Carson St./Clark Ave. (I/S #47; 1,449**)	
- Carson St./Woodruff Ave. (I/S #49; 2,002**)	
- Carson St./Cherry Ave. (I/S #43; 2,183**)	
- Carson St./Palo Verde Ave. (I/S #50; 2,559**)	
o Paramount Corridor	1,507*
- Paramount Blvd./Del Amo Blvd. (I/S #31; 1,507**)	
- Paramount Blvd./South St. (I/S #16; 1,663**)	
- Paramount Blvd./Artesia Blvd. (I/S #12; 1,677**)	
- Paramount Blvd./Alondra Blvd. (I/S #2; 2,265**)	
o Redondo/Pacific Coast Hwy. Corridor	2,223*
- Pacific Coast Hwy./Redondo Ave. (I/S #99; 2,223**)	
- Redondo Ave./Anaheim St. (I/S #101; 3,384**)	
- Redondo Ave./Willow St. (I/S #88; 4,135**)	
- Redondo Ave./Spring St. (I/S #77; 4,403**)	
- Pacific Coast Hwy./7th St. (I/S #104; 5,073**)	

- o Lakewood Corridor (B) 2,402*
  - Lakewood Blvd./Artesia Blvd. (I/S #13; 2,402**)
  - Lakewood Blvd./Candlewood St. (I/S #23; 3,307**)
  - Lakewood Blvd./Del Amo Blvd. (I/S #32; 3,766**)
  - Lakewood Blvd./Wardlow Rd./Douglas Rd. (I/S #66; 4,584**)
  - Lakewood Blvd./Conant St.-G St. (I/S #60; 4,610**)
  - Lakewood Blvd./Alondra Blvd. (I/S #3; 4,850**)
- o Del Amo Corridor 3,194*
  - Del Amo Blvd./Clark Ave. (I/S #33; 3,194**)
  - Del Amo Blvd./Woodruff St. (I/S #35; 3,194**)
  - Del Amo Blvd./Orange Ave. (I/S #29; 3,718**)
  - Del Amo Blvd./Palo Verde Ave. (I/S #36; 4,459**)
- o Carson Corridor (B) 3,981*
  - Carson St./Los Coyotes Diagonal (#51; 3,981**)
  - Carson St./605 Fwy. SB Off-Ramp (#52; 4,646**)
  - Carson St./Norwalk Blvd. (#55; 4,646**)
  - Carson St./Paramount Blvd. (#44; 4,891**)
- o Atlantic Corridor 4,459*
  - Atlantic Ave./Carson St./ (I/S #41; 4,459**)
  - Atlantic Ave./Wardlow Rd. (I/S #63; 4,850**)
- o South St./Clark Ave. (I/S #18; 5,073**) 5,073*

** Individual intersection (I/S) trigger value.

Also, fund or cause the funding for the design and construction of a centralized ATCS/ITS command center to operate and manage the area-wide ATCS and affiliated ITS measures.

Trigger Value: 1,081 Peak Hour trips

Category B - Intersection Improvements

1. Carson Street/Lakewood Boulevard (Intersection 45, Cities of Long Beach and Lakewood): Widen on the west side of Lakewood Boulevard from Carson Street to F Street (new). At Carson Street, remove the second southbound left-turn lane; modify and shift the raised islands on the north and south legs; and restripe the north and south legs to provide an extended southbound left-turn lane, and a fourth southbound

through lane from north of Carson Street to the vicinity of F Street, where the lane becomes a right-turn-only lane accessing F Street.

Trigger Value: First Project residential certificate of occupancy.

2. F Street/Lakewood Boulevard (Intersection 106, City of Long Beach): Construct F Street as a fully improved public street with a curb-to-curb width of no less than 50 feet, exclusive of any raised median, between proposed 2nd Avenue and Lakewood Boulevard; open and modify the raised island on Lakewood Boulevard for left-turn channelization; and restripe to provide a northbound left-turn lane accessing F Street. Install a traffic signal to control this intersection.

   Trigger Value: First Project residential certificate of occupancy.

3. Conant Street-G Street/Lakewood Boulevard (Intersection 60, City of Long Beach): Construct G Street as a fully improved public street with a basic curb-to-curb width of no less than 56 feet, exclusive of any raised median, between proposed 2nd Avenue and Lakewood Boulevard. Construct additional roadway width on G Street approaching Lakewood Boulevard to provide one left-turn lane, one through lane and two right-turn-only lanes eastbound. Restripe and convert the right-turn-only lane on the east leg of Conant Street to a westbound through/right-turn shared lane. Modify the existing traffic signal at Conant Street as necessary to control this intersection.

   Trigger Values: First Project residential certificate of occupancy for construction of G Street and 3,637 Peak Hour trips for restriping changes to Conant Street.

4. Carson Street/2nd Avenue (Intersection 109, City of Long Beach): Construct 2nd Avenue as a fully improved public street with a curb-to-curb width no less than 50 feet, exclusive of any raised median, between Carson Street and proposed C Street. Restripe Carson Street to provide a westbound left-turn lane accessing 2nd Avenue (new). Install a traffic signal to control this intersection.

   Trigger Value: Certificate of occupancy for first Project building along 2nd Avenue between Carson Street and C Street.

   Also, construct 2nd Avenue as a fully improved public street with a curb-to-curb width of no less than 50 feet, exclusive of any raised median, between proposed C Street and proposed F Street no later than the certificate of occupancy for the first Project building along this street segment. In addition, construct 2nd Avenue as a fully improved public street with a curb-to-curb width of no less than 36 feet, exclusive of any raised median, between proposed F Street and proposed G Street no later than the certificate of occupancy for the first Project building along this street segment.

5. Douglas Center Drive-C Street/Lakewood Boulevard (Intersection 105, City of Long Beach): Construct C Street as a fully improved public street with a curb-to-curb width of no less than 36 feet, exclusive of any raised median, between proposed 2nd Avenue and Lakewood Boulevard; modify the raised island on Lakewood Boulevard for left-turn channelization; and restripe to provide a northbound left-turn lane accessing C Street. Modify the existing traffic signal at Douglas Center Drive as necessary to control this expanded intersection.

   Trigger Value: Certificate of occupancy for first Project building along C Street between 2nd Avenue and Lakewood Boulevard.

6. Carson Street/Paramount Boulevard (Intersection 44, City of Lakewood): Widen on the east side of the south leg of Paramount Boulevard; modify and shift the raised island on the north leg; remove the raised island on the south leg; and restripe the north and south legs to provide a northbound right-turn-only lane on Paramount Boulevard.

   Trigger Value: 618 Peak Hour trips.

7. Del Amo Boulevard/Lakewood Boulevard (Intersection 32, Cities of Lakewood and Long Beach): Widen on the east side of the north leg and the west side of the south leg of Lakewood Boulevard; remove the nose islands and modify the remaining raised islands on the north and south legs; and restripe the north and south legs to provide a second southbound left-turn and three through lanes in each direction on Lakewood Boulevard.

   Trigger Value: 891 Peak Hour trips.

8. Carson Street/Bellflower Boulevard (Intersection 48, Cities of Long Beach and Lakewood): Prohibit parking during the AM peak period on the north side of Carson Street (up to approximately 75 spaces) for a length of approximately three blocks east and west of Bellflower Boulevard; modify and lengthen the left-turn channelization along the raised islands on the east and west legs of Carson Street; and restripe this length of Carson Street to provide a third westbound through lane, including conversion of the right-turn lane at Bellflower Boulevard, for the AM peak period and lengthened left-turn lanes approaching Bellflower Boulevard.

   Trigger Value: 1,677 Peak Hour trips.

9. Wardlow Road and Cherry Avenue (Intersection 65, City of Long Beach): Remove on-street parking on Cherry Avenue; widen on both sides of the south leg of Cherry Avenue; shorten the raised island on the north leg; and restripe the north and south legs to provide a third southbound through lane.

   Trigger Value: 1,851 Peak Hour trips.

10. Cover Street/Paramount Boulevard (Intersection 56, City of Lakewood); Cover Street from Paramount Boulevard to west of Industry Avenue (Cities of Long Beach and Lakewood): Construct and stripe the Project Roadway approaching the intersection of Cover Street/Paramount Boulevard to provide two through lanes and a right-turn-only lane westbound, and a bike lane in each direction. Reconstruct Cover Street as necessary and restripe to provide a left-turn lane and two through lanes eastbound, and a bike lane in each direction. Restripe Paramount Boulevard to provide a left-turn lane and a right-turn-only lane southbound.

    Remove on-street parking on the north side of Cover Street (up to approximately three spaces); widen on the north side of Cover Street from approximately 100 feet west of to 340 feet east of Industry Avenue; modify and lengthen the left-turn channelization along the raised island on the east leg at Industry Avenue; and restripe to provide two through lanes, left-turn channelization and a bike lane in each direction, including an extended westbound left-turn lane at Industry Avenue, from Industry Avenue to the improvement at Paramount Boulevard. Restripe the west leg of Cover Street at Industry Avenue to provide two eastbound through lanes, including conversion of the right-turn-only lane, and two westbound right-turn-only lanes departing the intersection and approaching Cherry Avenue.

    Restripe Industry Avenue between Cover Street and Bixby Road to provide a left-turn lane and two right-turn-only lanes northbound, a southbound through lane, and a bike lane in each direction.

    Trigger Value: Pursuant to Section 2.4.2(c) of Development Agreement.

11. Cover Street/Cherry Avenue (Intersection 108, Cities of Long Beach and Lakewood): Remove on-street parking on the east side of Cherry Avenue (up to approximately 12 spaces) and both sides of Cover Street (up to approximately 24 spaces);open and modify the raised island on Cherry Avenue between Roosevelt Road and Bixby Road, and restripe to provide a southbound left-turn lane accessing Cherry Avenue and a third northbound through lane. Restripe Cover Street to provide a second westbound right-turn-only lane and no westbound left-turn lane. Remove the Stop sign control on Cover Street and install a “half signal” that controls all movements except for the southbound through movement on Cherry Avenue.

    Trigger Value: Construction of No. 10 above.

12. Bixby Road and Cherry Avenue (Intersection 59, Cities of Long Beach and Lakewood): Remove on-street parking on Bixby Road between Cherry Avenue and Industry Avenue (up to approximately 37 spaces); and restripe the east leg of Bixby Road to provide one left-turn lane, one left-turn/through shared lane and one right-turn-only lane.

Trigger Value: Construction of No. 10 above.

Category C - Project Transportation Demand Management Program

Prior to the issuance of the first building permit for any Office Park ("Commercial District") use, the Company or its designee shall submit for City approval a Transportation Demand Management (TDM) Program. The TDM Program shall be designed to achieve a 20 percent reduction in Peak Hour trips generated by the Office Park ("Commercial District") uses. The employee commute mode choice shall be annually monitored and the TDM Program adjusted, if necessary, to achieve a 20 percent trip reduction. The City shall determine, based on actual performance, whether the TDM Program will reasonably achieve a 20 percent reduction in Peak Hour trips. The City shall not issue building permits for Office Park ("Commercial District") uses beyond 2,480,000 gross square feet, except to the degree to which actual reductions have been achieved and subject to any adjustments for equivalency conversion between uses. The following formula shall be used for this determination:

Allowable Office Park ("Comm. Distr.") Building Area = (80% x 3,100,000 gsf) + (% actual trip reduction achieved x 3,100,000 gsf)

The issuance of building permits for Office Park ("Commercial District") uses shall be subject to the limitation that the Office Park ("Commercial District") building area shall not exceed 3,100,000 gross square feet unless other uses are reduced in size by the equivalency procedures. In the event that the equivalency procedures are used, the 3,100,000 gross square-foot limits described above shall all be adjusted accordingly.

Trigger Value: First Project building permit for Office Park ("Commercial District") use.

Category D - Regional Transportation Improvements

San Diego Freeway Northbound On-Ramp from Southbound Cherry Avenue: Widen within the merge area where the two northbound on-ramps from Cherry Avenue converge to provide an elongation of the merge section for a smoother and safer merge. Relocate the ramp metering location for southbound traffic from Cherry Avenue to provide additional queuing length between the meter and Cherry Avenue.

Trigger Value: No later than 5,000 Peak Hour trips.

Category E - Neighborhood Traffic Management Measures

The Company or its designee shall make an initial lump sum payment of $250,000 to the City of Long Beach, which the City shall administer for the study, design and implementation of neighborhood traffic management measures to deter potential Project traffic intrusion into the residential areas analyzed in the Draft EIR. The City shall coordinate with the City of Lakewood and other neighborhood groups in residential areas that may also be significantly affected by such traffic intrusion. Potential neighborhood traffic management measures may include, but not be limited to the following: additional Stop signs; speed humps; turn restrictions; signal timing strategies; signalization prohibiting through traffic movements; parking restrictions; diverters; chokers; cul-de-sacs; partial cul-de-sacs; median islands; woonerfs ("chicanes"); traffic circles; one-way streets; and residential identity signs, gates or monuments.

Trigger Value: First Project building permit for initial $250,000 payment.

If requested by the City, and no sooner than 3,000 Peak Hour trips, and provided that the initial $250,000 payment has been spent and a complete accounting thereof is submitted to and accepted by the Company or its designee, the Company or its designee shall make an additional lump sum payment of $250,000 to the City for additional design and implementation of neighborhood traffic management measures for the above-described residential areas. Any unused portion of this payment shall be returned to the Company or its designee within one year after the expiration of the Development Agreement.

Category F - Bicycle Facility Improvements

In keeping with the intent of the Long Beach Bicycle Master Plan, the project shall continue to provide a Class I bike lane within the Carson Street parkway adjacent to the site, and shall provide a bike lane that extends south from Carson Street and west to the Paramount Boulevard/Cover Street intersection. These bicycle facility improvements shall occur concurrently with the phasing of the on-site streets.

Trigger Value: Pursuant to Section 2.4.2 of Development Agreement.